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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/612,182	07/07/2000	Claus Zurbig	2198/OH294	9080

7590

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Darby & Darby PC  
805 Third Avenue  
New York, NY 10022

EXAMINER

BISSETT, MELANIE D

ART UNIT

PAPER NUMBER

1711

DATE MAILED: 05/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/612,182

Applicant(s) *gm 9*

ZURBIG ET AL.

Examiner

Melanie D. Bissett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 March 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 16-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 28-31 is/are rejected.
- 7) ☒ Claim(s) 6-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \*   c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.                      6) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of Group 1, claims 1-15 and 28-31 in Paper No. 8 is acknowledged. The traversal is on the ground(s) that the groups are closely interrelated, and a search of the composite structure would require a search of the method. This is not found persuasive because, although the groups are related, they are patentably distinct for the reasons set forth in the Office action dated 2/19/03. The examiner also noted the various search classes for the groups in the aforementioned Office action. It is the examiner's position that the search for the claimed composite structure would not require searching the claimed method. For example, the method requires spreading a reactable polyurethane-forming composition onto a tape or coated tape, thermally hardening the spread, applying an adhesive, applying a textile layer, and removing the composite from the tape. Since the claimed composite does not require, for example, a tape support or an adhesive layer, a search for the composite would not necessitate a search of the method's limitations.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 16-27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 8.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 and 28-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Lewis et al.

5. Lewis discloses compositions comprising polyurethane coatings for treating leather or leather substitutes (abstract). Other substrates include textiles, PVC, foams, and polyolefins (col. 5 lines 24-31). More than one polyurethane coating may be applied as desired (col. 4 lines 49-52). Examples show prepolymers of toluene diisocyanate with various polyether polyols, including polypropylene oxide glycol having a molecular weight of 2010 (col. 6). Such a polyurethane prepolymer would fit the applicant's formula (I), where n is at most an estimated 3 (maximum prepolymer weight of 6400/average repeat unit weight of 2184 based on toluene diisocyanate and polyol).

6. Claims 1-5, 28, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Mück et al.

7. Mück discloses an artificial leather composite comprising a fibrous sheet material and at least two layers of polyurethane elastomer (abstract). For the polyurethane materials, the use of diols or triols having a molecular weight of 400-400,000 is mentioned, including polypropylene oxide (col. 6 line 28-col. 7 line 42). An example

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shows a polyurethane prepolymer made by reacting polyoxyethylene glycol with diphenyl methane diisocyanate, which would fit the applicant's formula (I). The composition is coated onto a textile support. It is the examiner's position that such a polyurethane would also fit the claimed  $n$  value. The reference suggests a value of at least one, and because of the broad claimed range and the low prepolymer molecular weights indicated (col. 6 lines 36-41), it is the examiner's position that the polyurethanes of the invention would inherently possess the applicant's claimed  $n$  value. The polyurethanes may be coated onto a strippable layer, including polyolefin layers (col. 8 lines 5-24), suggesting a support layer of polyolefin.

8. Claims 1-5, 28, and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishimura.

9. Nishimura discloses a leather-like material having a fibrous substrate layer, a porous polyurethane surface layer, a polyurethane surface coating, and another polyurethane coat layer (abstract). The substrate includes various textiles (col. 4 lines 10-26). Polyurethane I, of the surface layer, is a reaction product of a polymer diol having a molecular weight of 500-3000, including polyether and polyester diols (col. 5 lines 3-17) and an aromatic diisocyanate including tolylene and diphenylmethane diisocyanates (col. 5 lines 18-36). Polypropylene ether glycol is mentioned as a polyether glycol. Polyurethane II, a surface layer coating, is a reaction product of a polymer diol having a molecular weight of 500-3000, including polyether and polyester diols (col. 6 lines 39-57) and an aliphatic diisocyanate including hexane and isophorone

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diisocyanates (col. 6 lines 58-68). Polypropylene ether glycol is mentioned as a polyether glycol. Example 2 exhibits a surface coating made from polyoxyethylene glycol having a molecular weight of 2000, a polyester glycol, isophoronediiisocyanate, and a diamine, which is coated onto a polyurethane foam surface layer. It is the examiner's position that the polyurethanes of the invention fit the applicant's formula (I) because of the reactants used, including the n value of the repeat units. The reference suggests a value of at least one, and because of the broad claimed range, it is the examiner's position that the polyurethanes of the invention would inherently possess the applicant's claimed n value.

***Allowable Subject Matter***

10. Claims 6-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. The following is a statement of reasons for the indication of allowable subject matter:

12. The closest prior art, Lewis et al. (US 3,816,168 A), discloses compositions comprising polyurethane coatings for treating leather or leather substitutes, where polyoxypropylene glycols are used to form the polyurethanes. However, the reference makes no mention of a ratio of primary to secondary functional groups. It is the examiner's position, therefore, that the applicant's claimed ratio of primary to secondary

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hydroxyl end groups in the applicant's claimed composite structure would provide a novel, unobvious step over the prior art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie D. Bissett whose telephone number is (703) 308-6539. The examiner can normally be reached on M-F 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

mdb  
April 24, 2003



James J. Seidleck  
Supervisory Patent Examiner  
Technology Center 1700